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## National Park Interpretation and Place-Based Education: An Integrative Literature Review

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# National Park Interpretation and Place-Based Education: An Integrative Literature Review

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## Abstract

**Background:** Both national park (NP) interpretation and place-based education (PBE) approach learning by applying the unique attributes of a place to facilitate meaning-making experiences within learners. Despite the similarities between these two place-centered pedagogies, there is a limited amount of collaboration between NP interpretative services and school systems engaged with PBE. **Purpose:** Within this integrative review, my purpose is to fully consider both NP interpretation and PBE to present a comprehensive understanding of the two types of pedagogies. **Methodology/Approach:** Following an integrative review methodology, I use three different databases to access relevant empirical and theoretical articles. I evaluate and analyze each article separately, then methodically integrate the two place-centered pedagogies. **Findings/Conclusions:** There are some key similarities between ideologies and epistemologies, goals, approaches to learning, and content matter of NP interpretation and PBE. There are also considerable differences relating to perceptions of learning, the incorporation of the local setting, and the role of the community. **Implications:** A collaboration between the National Park Service (NPS) and place-based educators has the potential to open up a wealth of possibilities when it comes to learning about and caring for the rich ecology, history, and culture of a given place.

## Keywords

national park interpretation, place-based education, place-based pedagogy, environmental education, outdoor learning

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Learning about local issues and knowledge within a situated context is not a new phenomenon (Smith & Sobel, 2010). The idea of pedagogy grounded within a specific place can be located within deep-rooted Indigenous land education, centered on concepts of place (Wooltorton et al., 2020) and within Dewey's philosophies in the late 1800s (Deringer, 2017). Today in North America, there is evidence of this place-centered pedagogical approach within both the national park (NP) interpretive services and school-based place-based education (PBE) programs. The long history of the NPs has positioned the National Park Service's (NPS) interpretive services to educate the public in a place-specific manner that draws upon ecology, history, culture, and other related subjects established within a unique space. In a similar field, PBE is an approach to learning that harnesses the unique attributes of a place to facilitate meaning-making experiences within each learner. PBE is a growing movement within school systems typically geared toward kindergarten through Grade 12 learners. Despite the similarities between these two pedagogical approaches, NP interpretation and PBE, there is a surprisingly limited amount of collaboration between the NPS and school systems engaged with PBE, as evidenced within the literature. Operating within two separate spheres and drawing from different academic sources, the NPS and PBE appear to engage in comparable learning practices yet share minimal intentional dialogue with one another. There is a recognizable relevance to experiential learning present within these learning approaches that has implications for the broader field of experiential education. Through this integrative literature review, I seek to generate a holistic conceptualization of NP interpretation and PBE and identify implications that will potentially grow the effectiveness of both fields.

In spite of the long-standing nature of pedagogies grounded in a local place, there is a lack of cohesion within the literature, a common occurrence with mature topics that have experienced an expansion of knowledge over time (Torraco, 2016). This can be particularly seen within the current divergent nature of NP interpretation and PBE, regardless of their commonality of meaning-making experiences based on place. Within NPS documents, there is a well-established approach to interpretation that is thoroughly documented and analyzed (NPS, 2018). PBE, however, is a relatively new term, despite its deep roots in much older philosophical writings (Maguth & Hilburn, 2011). The research indicates that both NP interpretation and PBE have apparent strengths and shortcomings concerning their adherence to place-centered pedagogy. For example, the NPS is working to reevaluate its goals and interpretive approaches to ensure relevancy and diversity, given the shifting population in the United States (Coslett & Chalana, 2016). PBE has the potential to complement and enhance NP interpretation, given its adherence to place and culturally sensitive practices (Reid, 2019). One shortcoming within PBE is the significant complexity concerning the theory of place-specific learning as well as definitions of the terms *place* and *community* (Nespor, 2008). Considering the rich history of the NPS' interpretation of place-specific sites, there is potential for K-12 educators to learn from the NPS and its methods while applying abstract theory to a more practical place-specific approach. A collaboration between the NPS and place-based educators could potentially open up a wealth of possibilities when it comes to learning about and caring for the rich ecology, history,

**Table 1.** Journals and Sources Used Within the Review.

Journal/source	Frequency
National park interpretation	
<i>Journal of Sustainable Tourism</i>	2
<i>Journal of Interpretation Research</i>	2
Book	2
<i>BioScience</i>	1
<i>The Public Historian</i>	1
<i>International Journal of Heritage Studies</i>	1
<i>Society and Natural Resources</i>	1
ProQuest Dissertations and Theses	1
Place-based education	
Book	2
<i>Journal of Experiential Education</i>	1
<i>Journal of Environmental Education</i>	1
<i>Childhood Education</i>	1
<i>Ohio Social Studies Review</i>	1
<i>InSight: A Journal of Scholarly Teaching</i>	1
<i>Multicultural Education</i>	1
<i>Phi Delta Kappan</i>	1

and culture of a given place. An integrative review of the literature has the potential to illuminate insights concerning place-centered pedagogy as well as point out deficiencies within the recent diversification of the field (Torraco, 2016).

## Method

An integrative literature review allows for diverse methodologies to be considered and is best suited for producing a comprehensive understanding of a phenomenon even with apparent disparate studies (Whittemore & Knafl, 2005). I followed the methodology put forth by Whittemore and Knafl (2005) and used the data analysis strategies that they suggest. During the literature search stage, I used three computerized databases and examined specific journals such as *Journal of Sustainable Tourism*, *Journal of Interpretation Research*, and *Journal of Experiential Research* to find relevant articles. Table 1 displays the journals and number of print sources I used in this integrative literature review. The search words “national park interpretation” yielded a great deal of the research focusing on evaluating the effectiveness of programs, typically by analyzing the success of environmental goals or of visitors’ perspectives. (Forist, 2018; Marion & Reid, 2007). Other NP interpretive literature takes on a critical theory point of view, assessing the underlying assumptions that prevent park educational programs from successfully representing all people groups or cultures (Jackson, 2019). I chose to include both types of literature pertaining to NPs—evaluative and critical—to have a well-rounded group of studies to analyze. Searching for “place based education OR

place based learning” resulted in both theoretical PBE studies as well as empirical research, most of which takes place in a traditional school environment (as opposed to an informal setting). Because the idea of *place* is central to this integrative review, I chose to concentrate my analysis primarily in the North American context, with the exception of Dolan’s (2016) conceptual piece on PBE due to her excellent and comprehensive synthesis of PBE across diverse contexts.

During the data evaluation stage, I considered the quality of each source in a meaningful way depending on the type of study (Whittemore & Knafl, 2005). I then moved onto the data analysis stage, first by conducting a data reduction in which I created initial subgroups of different sources and then by designing a manageable framework (Whittemore & Knafl, 2005). I displayed the data by color-coding key ideas and then using charts to organize concepts (Whittemore & Knafl, 2005). Within the data comparison phase of the data analysis, I considered both NP interpretation and PBE, making note of the relationships between the two (Whittemore & Knafl, 2005). In this integrative review, I will examine components of each separately and then describe the connections between NP interpretation and PBE that emerged from the data. Specifically, I will examine the ideologies and epistemologies, goals, approaches to learning, and content matter. Finally, I will end with important conclusions regarding recommendations and suggested next steps for both pedagogical approaches.

## **Integrative Review of NP Interpretation and Place-Centered Pedagogy**

### *Ideologies and Epistemologies of NP Interpretation*

The idea of interpretation is centered around the process of “revealing” (Knapp, 2007; Tilden, 1957). Modern-day park interpretation is typically viewed as a way of expressing ideas to make meaning (Larsen, 2003). Throughout the history of NP interpretative programs, there is evidence of shifting ideologies specifically demonstrated through the evolution of place-related ideas. For instance, during World War II, interpretation’s purpose centered on demonstrating the importance of NPs to the war effort (Mackintosh, 1986). The Cold War in the 1950s incited the NP interpretive services to reveal meaning behind the United States’ own history to avoid conflicting ideologies. (Mackintosh, 1986). When it comes to epistemologies, or ways of knowing, there is no distinct mention of which epistemological views underlie the official NP position on interpretation. The historical record indicates that the perspectives on the nature of place knowledge within the NPs have also fluctuated, being seen as a source of entertainment, facts to be conveyed, or rich concepts (Mackintosh, 1986).

Based on current documents from the NPS’ Interpretive Development Program (2007), ideas surrounding knowledge from the interpreter’s perspective have become more defined:

Knowledge is more than just the facts about the resource. Interpreters must identify and be fully aware of the many different intangible and universal meanings the resources represent

to various audiences. Interpreters must possess a very broad knowledge of the history of the park beyond just the enabling legislation. They must be knowledgeable about past and contemporary issues, and the condition of the park and its resources. (p. 12)

This excerpt provides clues concerning the underlying epistemologies of NP interpretation that significantly affect what interpretive programs look like. Hvengaard et al. (2009) argue that park legislation, societal values, and public attitudes are key factors in shaping the general framework of NP interpretation. Some researchers question the underlying epistemologies of NPs, challenging the public to consider whose voices are being represented through the goals and approaches of park educational programs (Coslett & Chalana, 2016; Jackson, 2019). Past and present ideologies and epistemologies which form the backbone of NP interpretation have the potential to greatly affect the goals, content, and approaches of a park's place-centered pedagogical program.

### *Ideologies and Epistemologies of PBE*

The available literature concerning PBE and its related ideologies is not in accord concerning the abstract concept of *place* (Nespor, 2008). There appears to more consistency surrounding the primary epistemologies fundamental to the pedagogy. PBE as a way of knowing is a type of experiential outdoor learning that uses the local community and environment as the source for deep authentic learning (Dolan, 2016; Goodlad & Leonard, 2018; Sobel, 2005). The home space becomes a laboratory for learning that encourages critical thinking about relevant connections (Maguth & Hilburn, 2011). The inherent cross-cultural and student-centered nature of PBE demonstrates its intrinsic epistemology involving the role of the learner and the narratives that unfold. Despite the lack of a precise epistemological description, there are heavy inferences regarding the foundational worldview behind PBE and its subsequent actualization. Therefore, the idea of place *must* come from multiple perspectives as well as differing narratives; PBE is a tool to foster an openness to a variety of cultures, allowing students to grow and change in their thinking toward local places (Reid, 2019; Sloan, 2013). When students are immersed “in local heritage, cultures, landscapes, and opportunities” this type of learning “leverages the power of place” (Liebtag, 2018, p. 38) leading to a personal shift in their frame of reference concerning the world around them (Sloan, 2013).

### *Goals of NP Interpretation*

The NPS (2006) has two clearly stated goals within their written policy as to the purpose of interpretation and education within the park. The first listed goal of interpretive services is “to connect people to the park” and allow them to form their own meanings and connections (NPS, 2006, para. 1). NPS (2006) mentions the second goal of encouraging environmental stewardship in a personal way with an effort to grow public support of the park land and resources. These two goals reflect the NPS' (2006)

position on interpretation and its purpose of guiding visitors to form their own meanings and associations.

Beyond the NPS' stated goals, other literature asserts additional purposes, such as the significance in revealing multicultural meaning and relationships through provocation (Coslett & Chalana, 2016). Fostering an attachment to place or "forging a connection" (NPS, 2006, para. 2) cultivates a sense of wonder in visitors which can lead to a deeper personal association with nature (Ben-Ari, 2000). Skibins et al. (2012) posits interpretation as a "highly adaptable tool," listing a variety of strategic objectives that interpretation can accomplish (p. 36). Stern et al. (2013) speak of the longevity of interpretive experiences, putting forth the objectives that go beyond immediate outcomes and focus on reflection and long-lasting effects. In Wallace and Gaudry's (2002) study, a specific type of interpretation—Authority of the Resource Technique (ART)—is described along with its associated goal of helping visitors understand that authority for behavioral change resides in the natural resource as either a process or an object. Although NPS (2006) has clearly stated goals within its written policy, Skibins et al. (2012), Stern et al. (2013), and others show that subset goals exist within certain types of interpretation and at particular sites.

### Goals of PBE

Within the PBE literature, there is evidence of two clear goals which supplement each other both in principle and practice. The first purpose of PBE is to enable a relationship and connection to the land through planned programs (Knapp, 2005). This idea of place attachment to a local area and community is a key aim of PBE (Goodlad & Leonard, 2018), one that resists common instances of alienation prevalent in today's society (Smith, 2002). It involves focusing on that which is *near*, leading learners toward an understanding of the place in which they belong (Sobel, 2008). The goal of place attachment is followed closely by the objective of *learning* that is derived from this environmental and cultural connection (Dolan, 2016). To this end, PBE seeks to teach students to steward the natural environment as well as develop a cultural awareness (Dolan, 2016; Sloan, 2013). It drives students to question about the world and how to *be* within it (Reid, 2019). PBE's objective of place attachment and transformational learning are not dichotomous but are significant purposes that weave together the overarching goals of this pedagogical approach.

### Approach to NP Interpretation

NP interpretation is first and foremost interactional in nature (Powell et al., 2009). Interpretation within the NPs is best thought of as a two-way dialogue, or hermeneutical discourse that involves both parties—interpreter and experiencer—within its approach (Forist, 2018; Henning, 2008). The interactional nature of NP interpretation can be seen through the multiple interpretations of the same NP place, resulting in constructed meanings that consist of various elements (Henning, 2008). The NPS' (2006) interpretive policy states that visitors should form their own connections to the

meanings within the park, implying that visitors take on a crucial role in the experience. Long before the formalized role of the park ranger profession, “the visitor was granted agency to construct meaning through their own experiential lens” (Forist, 2018, p. 2).

A dialogic perspective of NP interpretation stands in direct contrast to a more didactic approach, wherein the interpreter has an end goal of knowledge that he or she wishes to impart (Marion & Reid, 2007). Despite NPS’ Interpretive Development Program (2007) statement that interpretation is an act of translating and helping visitors make meaning of various resources, there is evidence of a more traditional didactic approach to NP interpretation (Knapp, 2007). This can be perceived within the NPS’ (2006) policy mentioning important educational intents in a more fact-based, objective-driven style.

Interpretation will encourage dialogue and accept that visitors have their own individual points of view. Factual information presented will be current, accurate, based on current scholarship and science, and delivered to convey park meanings, with the understanding that audience members will draw their own conclusions. (para. 8)

In addition, the NPS states that an end goal is for visitors to “retain information, grasp meanings, and adopt new behaviors and values” due to their interpretive experiences in the park (NPS, 2006, para. 2). It is clear that there is somewhat of a disparity within the NPS’ approach to interpretation, which could arise out of a gap between theory and practice.

Forist (2018) made note of this theory/practice gap in his recognition of many one-sided, lecture-based park programs in which the interpreter served as the ultimate authority. Forist (2018) goes on to suggest that knowledge should arise from the visitors’ interaction with the natural environment, while the park ranger serves as a facilitator of knowledge. In Forist’s (2018) study, he analyzed the strength in two-way interpretation, noting the employed elements, such as *openness* and *presence* among others. Through Forist’s (2018) example and a comparison of NPS literature with other studies, it appears as if the ideal meaning-making process involves an interactional approach, but that this is not always actualized.

### *Approach to PBE*

A key component of PBE’s definition rests in its approach to learning that is based on lived experiences within one’s immediate surroundings (Knapp, 2005). Maguth and Hilburn (2011) further delineate PBE by explaining its instructional approach and the necessity of real-world authentic experiences. Place-centered pedagogy is highly dialogic and constructivist concerning how meaning is made and knowledge is built (Knapp, 2005), resulting in a style of learning in which teachers are also learners and learners are also teachers (Sloan, 2013). This is exemplified through a study by Santelmann et al. (2011) on a place-based, public school project involving middle school teachers and students visiting local farms and forests to better understand the



watershed. The students went to local sites and had opportunities to interview land-owners regarding their land use decisions (Santelmann et al., 2011). In addition, the students worked with aerial maps and worked toward a restoration situated in their own watershed (Santelmann et al., 2011).

The above example showcases how students are “active agents in their own learning” (Dolan, 2016, p. 52), building their own understanding of subject matter that is situated in local place. This type of learning approach requires the choice for learners to have freedom, creativity, and critical reflection to effectively construct meaning within a student-centered manner (Sloan, 2013). Teachers take on the role of experienced guides or colearners, ready to facilitate students in their knowledge acquisition with a constructivist approach (Smith, 2002, p. 593). PBE emphasizes genuine hands-on learning that innately leads to a greater engagement between participants, the course material, and the setting (Goodlad & Leonard, 2018).

Researchers have further defined PBE’s approach by representing five thematic patterns that outline the learning methodology. First, the local land and its connecting culture and history serves as the foundation for the curriculum, acting as the guiding focus (Knapp, 2005; Maguth & Hilburn, 2011; Smith, 2002). Second, this local environment is investigated and explored through experiential learning, with a focus on hands-on discovery (Smith, 2002). The third pattern evident within the literature is opportunities for relevant problem-solving connected to the local setting (Knapp, 2005; Smith, 2002). The fourth and fifth components involve partnership with local business and an immersion into the community (Smith, 2002). Within these themes of PBE’s pedagogical approach, constructivism takes on a critical function as teachers act as knowledgeable guides, colearning along with the students (Knapp, 2005, p. 280). Learners are encouraged to find connections and consider broader systems—ecological, cultural, and so on—throughout their place-based discoveries (Sloan, 2013).

### *Content of NP Interpretation*

Within an integrated meaning-making process, a local place is presented in an interdisciplinary way, connecting multiple concepts (Ben-Ari, 2000). Closely related to the NPS’ *approach* to interpretation, the *content* of that interpretation is comprehensive and holistic in nature. NP policy clearly states that the interpretive experiences are grounded “within the *context* [emphasis added] of the park’s tangible resources and the meanings they represent.” (NPS, 2006, para. 7). Thus, the distinct landscape and geography of park places serve as the integrating factor for educational programs. The content of NP interpretation cohesively connects to the meaning-making process of a particular park’s physical space.

Grounding a park’s interpretive program within the uniqueness of a place-specific location and its resources is considered a best practice for interpretation as referenced in recent literature (Martin, 2012). Within the context of a local place, the resources, people, landscapes, stories, artifacts, and activities can *all* be interpreted (Jackson, 2019). The physical land and place-specific history are commonly mentioned as

interpretive content within the research, yet more qualitative studies are needed to clarify other types of content that United States' NP interpretive programs incorporate.

### *Content of PBE*

Within PBE, place is the contextualizing factor that naturally integrates a variety of content. This involves an acknowledgment of both the historical and cultural connection to place in addition to the scientific viewpoint (Reid, 2019). Dolan (2016) recognizes the power a local place has in serving as a valuable resource for teaching and learning all types of content. Within the literature, there is evidence of many subject areas being addressed through PBE: geography, ecology, history, culture, social studies, science, language arts, math, economics, politics/government, social, environmental (Knapp, 2005; Maguth & Hilburn, 2011; Sloan, 2013; Smith, 2002). Reid (2019) goes so far as to mention the direct need for a landscape—physical, cultural, and natural—to give meaning to high-level concepts, including intercultural ways of knowing. Reid (2019) suggests that place-centered pedagogies can make room for a variety of epistemological narratives and perspectives, including domestic, international, and Indigenous.

It is important to note that PBE is *not* just about ideas, however, but concerns itself with concrete notions, tying the abstract to the tangible world (Smith, 2002). It is contextual and fully integral, incorporating multiple content areas (Goodlad & Leonard, 2018). Although geography and history are common PBE content, other school subjects have been integrated with localized community and environmental learning, such as art education (Rearden & Bertling, 2019) and mathematics (Howley, 2011). Other research shows a myriad of examples of the content of PBE and what is precisely taught through this localized pedagogical approach, the description of which is beyond the scope of this article.

### **Comparison of NP Interpretation and PBE**

An analysis of the distinct literature on both NP interpretation and PBE reveals some commonalities between each type of place-centered pedagogy that I will discuss. There is evidence of fluctuations within the components of NP interpretation and PBE due to individual localized site differences as well as divergence between theory and practice. Ingham (2000) points out the discrepancy between the more recent, technical interpretation manuals that suggest information transfer and the original interpretive goals posited by Tilden in 1957 concerning meaningful relationships. Similarly, Nespor (2008) notes how “the theoretical perspectives developing around PBE are analogously broad and diverse” (p. 475). Because of the comprehensive nature of both NP interpretation and PBE, the following synthesis will serve as an initial review of the similarities between the goals, approaches, and content of NP interpretation and PBE.

There is a commonality between the intended goals of NPs and PBE. The concept of place attachment and sense of place is prevalent throughout all the literature. A primary

goal of PBE is to guide others toward a sense of place (Knapp, 2005) comparable to the role of NPs in producing a meaningful connection to the local place and resources being interpreted (Stern et al., 2013). PBE is frequently called pedagogy of place (Maguth & Hilburn, 2011), leading to an attachment that grows from an understanding based on both knowledge and experience (Powers, 2004). Unfortunately, studies situated in NPs oftentimes ignore the setting, or place, of nature-based interpretive programs and its importance in the experience for visitors (Powell et al., 2009). The relationships between humans and natural areas have been observed and researched within NPs and PBE, both recognizing the ability for experiences within an outdoor place to forge connections between people and the natural world (Powell et al., 2009; Smith & Sobel, 2010). This serves as an underlying goal of both NP interpretation and PBE.

Another common goal involves the subsequent benefits of fostering an attachment to place pertaining to long-term stewardship behaviors (Martin, 2012; Wallace & Gaudry, 2002). Within the NP literature, there is a clear correlation between environmental stewardship and a sense of connection to natural resources (Martin, 2012), a concept that the NPS (2006; NPS Interpretive Development Program, 2007) makes note of in their documents. The idea of emotional/intellectual connection to the land and its relationship to land care is not as explicitly studied within PBE, yet the key purpose of growing a learner's viewpoint and actions toward sustainability is prevalent. One of PBE's aims is to develop care toward a place, including both its ecological and social well-being (Dolan, 2016). NPs are more straightforward regarding this objective, emphasizing the necessity for both personal connection to the park as well as encouraging the adoption of new proenvironmental behaviors as explicitly mentioned in NPS (2006) policy. These two goals, place connection and environmental care, differ slightly in their emphasis, but both are transparently addressed in NP interpretation and PBE.

The approach to NP educational programs and PBE also shares commonalities. Both are interactional in nature and learner centered, promoting constructivism in which participants make their own meaning with teacher guidance. PBE is designed to be experiential and hands-on, an approach that is occasionally addressed within NP interpretation, especially in Knapp's (2007) work on applied interpretation. The NPS (2006) policy on interpretation and education states that visitors should be directly involved in the dialogical process. Likewise, PBE approaches experiences as a critical element of learning, one in which being involved with the land builds experiential knowledge (Dolan, 2016; Smith, 2002). The PBE approach involves "emphasizing hands-on, real-world learning experiences . . ." (Sobel, 2005, p. 11) akin to authentic NP interpretation which centers around the visitor and his or her participatory action leading to wonder and curiosity (Hvengard et al., 2009). Some NP literature, however, seems to indicate that many NP interpreters continue to offer lecture-based talks, sharing messages about a natural resource from an authoritative perspective (Forist, 2018; Knapp, 2007). For the most part, it appears as if both NP interpretation and PBE seek to approach learning from a student-centered and interactional viewpoint, leading learners to create their own meaning via hands-on experiences and carefully guided coaching.

In analyzing the content of NP interpretation and PBE, it is evident that the learning is contextual in nature, involving a variety of integrated topics that all connect to the broader idea of localized place. The interdisciplinary outlook of NPs is apparent through the ideas broached by interpreters, as is that of PBE's holistic programs. Within both educational approaches, place serves as the contextualizing factor through which other subject matter is addressed, an intersection between place and content (Dolan, 2016; Henning, 2008; Knapp, 2005). Going beyond simply scientific nature interpretation, both NP interpretive services and PBE incorporate other concepts, such as geography, history, and culture. PBE tends to focus heavily on the community aspect as an important piece of contextualized content matter (Maguth & Hilburn, 2011; Smith & Sobel, 2010), whereas research on NP interpretation does not specifically emphasize the significance of a community's role. There is little evidence within the North American NP literature of the role of community as part of interpretive practices. While both styles of education may have specific academic goals, the contextualization of multiple subjects within the context of *place* is a crucial component of both. NP interpretation and education must be grounded in the park's resources (NPS Interpretive Development Program, 2007), while PBE is established within the bounded regional space (Nespor, 2008); both involve a wealth of content and themes that connect to the idea of a local place.

## Discussion

In the final phase of an integrative literature review, the "interpretive effort [moves] from the description of patterns and relationships to higher levels of abstraction." (Whittemore & Knafl, 2005, p. 551). In this section, I will look more broadly at NP interpretation and PBE as valuable place-centered pedagogical approaches that focus on meaning-making centered *on* and *in* an outdoor environment. This integrative literature review explored the specific ideologies and epistemologies, goals, approaches to education, and content of NP interpretation and PBE. Despite some distinct differences, there were clear similarities between the two. Moving forward, I suggest a partnership between the NPS interpretation service and PBE movement with the end goal of growing the effectiveness of both types of place-centered learning.

One of PBE's key tenets is using the community as a laboratory for learning (Maguth & Hilburn, 2011). Although the NPS states that interpretive programs should seek to generate a connection "between park resources, visitors, the *community* [emphasis added], and the national park system," there is not an indication that interpretation is as community-centered as PBE (NPS, 2006, para. 1; Reid, 2019). There is *some* evidence of NP interpretation placing the local community in the role of the audience and forming conservation programs within this community (Ben-Ari, 2000). Moving forward, I suggest that the NPS reevaluate the community's role within their interpretive programs, not just in theory, but also in practice. What does it look like to have a social connection to community within an NP site? Which interpretive current practices are necessary in community outreach involving collaboration on a regular

basis? (Powell et al., 2017). Tackling these questions and learning from PBE principles will enable the NPS to increase their community-based effectiveness.

Another related recommendation involves the gap between theory and practice that is evident within the literature on NP interpretation (Ingham, 2000). The NPS (2006; NPS Interpretive Development Program, 2007) has documented detailed descriptions of intended interpretation goals and how these are to be accomplished, yet it is clear that this does not always happen in application through current practices (Powell et al., 2017). The techniques and strategies of interpretation, such as the two-way dialogue, are frequently omitted in interpretive park programs, despite the NPS goal of visitor meaning-making (Knapp, 2007). The NPS and individual interpretive park services can learn from PBE's more integrated approach between theory and practice. In particular, the five thematic patterns of PBE previously discussed (Smith, 2002) can inform NP interpretation for changing populations (Coslett & Chalana, 2016). When the approaches to NP interpretation are successfully applied in each program, the effectiveness of long-lasting effects on visitor attitudes and behaviors can be improved (Knapp, 2007; Wallace & Gaudry, 2002).

The NPS has a rich history of valuable educational practices that engage learners with a variety of topics grounded within a local place. School systems who participate in PBE can learn from park interpretive practices that involve an interactional approach between interpreter, visitor, and local geography. (Hvengard et al., 2009; Powell et al., 2009). In the same way, PBE can improve its ability to create an interactional system between teachers, students, and the local place and community. The NPS Interpretive Development Program's (2007) technique of choosing a theme that fits the desired goals can successfully be applied to PBE. As educators grow in their awareness of the long-standing interpretive traditions of the NPS, they will be able to refine their ability to teach integrally in a place-contextualized manner. In regard to PBE, I support the calls from others (Huffling et al., 2017) to move beyond traditionally insulated school subjects, and consider broader concepts that are relevant and learner centered. NP interpretation is not bound by content standards or conventional school-based structures, which enables interpreters to think comprehensively concerning contextualization to the local site. The creativity of the NP is seen through its variety of programs and content, all of which can help PBE expand its perceived limits.

The blending of PBE and NP interpretation could serve to inform a more critical perspective regarding the representation of place. Jackson (2019) draws attention to the concept of *public memory* within the NPS and the importance of historical context when interpreting a particular site. "Far too many national park facilities retain ideologies or vestiges of ideologies based on exclusion with respect to race and ethnicity" (Jackson, 2019, p. 671). There is a need for a critical frame of analysis when approaching experiential learning that is contextualized by space, time, and history. Some PBE literature recognizes and celebrates Indigenous ways of knowing—one example of desettling the dominant narrative of a given place (Tuck et al., 2014; Woollorton et al., 2020). In evaluating how to represent and interpret natural and storied places, PBE and NPS can develop critical approaches that take into account the role of power historically contextualized within a space.

The purpose of this integrative literature review was to “capture the depth and breadth of the topic and contribute to a new understanding of the phenomenon of concern” (Whittemore & Knafl, 2005, p. 552). Pedagogy rooted in a local place and its issues is not a new concept (Deringer, 2017), and iterations of this concept can be seen within the NP interpretative services as well as PBE. Kindergarten through Grade 12 educators engaged in PBE have the opportunity to learn from the NPS and its well-established place-centered interpretive methods. In turn, the NPS can learn from PBE practices of being integrally grounded to a local place, both geographical and related to community. This integrative literature review is a starting point for a growing conversation, or two-way dialogue, that can enhance both pedagogical approaches. Currently, it appears as if the NPS and PBE are functioning within two separate domains, despite the similarity in learning practices. Looking to the future, a collaborative effort between NPS’ interpretive program and place-based educators could have the potential to create a successful synergy of geographical, ecological, cultural, and historical learning that is all grounded within a local place.

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